



NORTH CAROLINA COAL ASH MANAGEMENT COMMISSION



MICHAEL JACOBS, CHAIRMAN

NATALIE K. BIRDWELL, EXECUTIVE DIRECTOR

NORTH CAROLINA COAL ASH MANAGEMENT COMMISSION Minutes of January 14, 2015 Meeting Raleigh, North Carolina

The Coal Ash Management Commission met on January 14, 2015, at the McKimmon Center in Raleigh, North Carolina. Chairman Jacobs called the meeting to order at 11:30 a.m.

ATTENDEES

The following Commissioners were present:

Michael Jacobs (Chairman)
Harrel Jamison Auten III
Herbert M. Eckerlin
Tim Bennett
Larry Cobb
Dr. D. Allen Hayes
Lisa Diaz Riegel
Harold Hopper

The following Commissioners were absent:

Rajaram Janardhanam, Ph.D

Commission executive director Natalie Birdwell and commission counsel Lisa Schneider were also present.

WELCOME

Chairman Jacobs welcomed everyone to the meeting and specifically welcomed new Commissioner Harold Hopper, who provided a brief personal introduction.

STATE ETHICS ACT COMPLIANCE

Chairman Jacobs, pursuant to the State Ethics Act, reminded the Commissioners that they are required to avoid conflicts of interest, and asked whether, in looking at the agenda, they saw any conflicts or potential conflicts of interest. None of the Commissioners noted any conflicts or potential conflicts of interest.

MINUTES

Commissioner Hayes moved to approve the minutes of the last meeting. His motion was duly seconded, and the minutes were approved by a unanimous vote.



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CAMC PRESENTATIONS

Lisa Schneider, Legal Counsel to the Coal Ash Management Commission, presented an overview of the new Coal Combustion Residuals ("CCR") rule issued by the EPA on December 19, 2014. Ms. Schneider explained that the rule regulates coal ash under Subtitle D of the Resource Conservation and Recovery Act ("RCRA"), meaning that it will not be classified as a hazardous waste. She explained that the rule does not create a federal permitting or enforcement process, but leaves that in the hands of the states and citizen suits. She stated that while the rule defines beneficial use, it does not put into place regulations governing beneficial use. Ms. Schneider further stated that the rule was still in pre-publication form, meaning that the final rule had not yet been published in the federal register. The CCR rule goes into effect 6 months after publication in the Federal Register.

Commissioner Auten introduced the primary subject matter of the meeting as being the beneficial use of coal ash and explained the Commission's requirements to develop a study on that topic. Commissioner Auten also provided an overview of some of the types of beneficial use potentially available for coal ash.

PRESENTATION BY CHRIS HARDIN

Chris Hardin, with CH2M HILL, talked about the different beneficial use projects undertaken throughout the United States, and gave practical examples from three different companies. He also discussed issues that may be holding back beneficial use in North Carolina.

PRESENTATION BY ED FINLEY

Ed Finley, Chairman of the North Carolina Utilities Commission, provided background on the regulation of public utilities, the role of the Utilities Commission, the criteria for rate-making, and cost recovery as it relates to coal ash.

PRESENTATION BY DR. MILIND KHIRE

Dr. Milind Khire, UNC-Charlotte, provided a global perspective on the use of coal ash. He presented a history of countries using coal ash since the 1920's, and focused particularly on China and Europe as good examples to look at for comparison purposes. He provided data on the production and utilization of coal ash in various countries throughout the world.

PRESENTATION BY DR. BRETT TEMPEST

Dr. Brett Tempest, UNC-Charlotte, explained the physical and chemical properties of coal ash that allow it to be used in various re-use projects. He spoke about the conversion of coal ash into constructible material, the benefits of using fly ash in concrete, and the environmental, economic and social sustainability of using coal ash.



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PRESENTATION BY DR. BOB RUBIN

Dr. Bob Rubin, Commissioner with the Environmental Management Commission ("EMC"), provided an update on the activities of the EMC related to beneficial use. He reported that their initial report on beneficial use, done in conjunction with DENR, had been submitted to the Environmental Review Commission. In regards to setting rules on beneficial use, he stated that rather than creating a list of allowable uses, they would set reasonable criteria for beneficial use, and that those criteria would be forwarded to the CAMC for its review and use. Dr. Rubin also stated that they had reviewed the North Carolina regulations on the use of CCRs and were considering whether and what changes might need to be made.

PRESENTATION BY DR. RAFIC MINKARA

Dr. Rafic Minkara, Vice President of Research and Development with Headwaters, spoke about the economics of fly ash in the concrete market and opportunities to increase the utilization of fly ash in concrete (e.g. beneficiating pond ash, increasing the percentage of coal ash in concrete, and developing more storage for the off-season). He stated that North Carolina does not mandate using a certain percentage of fly ash in concrete, while California mandates 25%. He also stated that production of quality fly ash may be decreasing, and there will be shortages during construction season. He discussed the costs to beneficiate coal ash, and agreed to provide the CAMC with a financial analysis based on case studies and assumptions for beneficiation.

PRESENTATION BY JIMMY KNOWLES

Jimmy Knowles, Vice President of Market Development and Research for SEFA Group, described what beneficiation means, and provided examples of the different commercial methods. He explained in detail the STAR process for beneficiation of coal ash from ponds and landfills. He also provided his thoughts on how to develop the market.

For a complete copy of all of the presentations made at this meeting, please see [Appendix A](#).

The next meeting will be the second or third week of March at UNC Charlotte.

There being no further business before the Commission, the meeting adjourned at 5:00 p.m.

APPENDICES

(All Appendices are a part of the official record of the meeting.)

Appendix A: All presentations are posted on the Coal Ash Management Commission website: www.camc.nc.gov



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